

UNIVERSITY OF TORONTO

Bulletin

No. 20 37th year

Tuesday, May 22, 1984

'Deep discounts' on microcomputers for U of T faculty, staff, students

by Judith Knelman

Following a pattern established on campuses in the US, the University of Toronto will offer its students, staff and faculty, beginning in June, a chance to buy microcomputers from several manufacturers at discounts of up to nearly 50 percent. The special deal will continue for a year.

The Hyperion, TI Professional, Eagle, and Apple family (Apple II, Lisa II and Macintosh) will be available for personal purchase at the Textbook Store next month. However, only the Apples will come with follow-up service at the bookstore; the others will have warranty services that can be obtained directly from the manufacturers. Negotiations are under way for several other models including the IBM PC and DEC Rainbow.

But at nearly half the manufacturer's list price the deal will be a better one than is available anywhere in Canada, says John Taylor, general manager of the bookstores. The Hyperion, for example, with 256 K of RAM, two 320-K disk drives, five software programs and a carrying case will sell for \$2,600 plus provincial sales tax to students, faculty and staff, for \$2,294 (with no tax or duty) to departments buying through the University purchasing system for research purposes and \$2,500 for administrative uses.

The Eagle will be \$3,278 for students, faculty and staff, \$2,997 for departments and \$3,152 for administrative use. For every 10 Eagles or TI Professionals sold, the University will receive a free computer from Lampar Technologies, Inc.

Students on some campuses in the US have been using computers to write essays, receive grades, send mail, look through library catalogues, consult with their professors and even take classes. If their micros are hooked

up to the university system, they can not only do word processing and record-keeping in their rooms but can use them as terminals, taking advantage of the large data bases and more substantial computing power in the mainframe.

Not all of that will happen at Toronto, but soon computer science students will be able to study at home if they buy their own computers, says Rick Holt, chairperson of the Computer Systems Research Group (CSRG). A prototype instructional laboratory is to be set up this summer for students to work on microcomputers instead of the mainframe. Students in CSC 148 who have compatible computers will be able to take their floppy disks home and work on their own. By September a student or faculty member with a modem will be able to arrange to dial on the telephone at home into the computer downtown to transfer files, says Holt. "It will be spectacular for handicapped students or for someone who lives far away from the campus and has forgotten something or can't come in." However, extended communication through telephone lines would be impractical on a large city campus, he says.

Most computer science courses will switch over from expensive, large computers to the more cost-effective personal computers. CSRG is adapting the Turing computer language, invented by Professors Holt, J.R. Cordy and J.N.P. Hume (*Bulletin*, Oct. 24/83) and adopted as the only introductory programming language in the Department of Computer Science, for use on personal computers.

The objective in encouraging the use of microcomputers, says David Nowlan, vice-president (research and government relations), who arranged for what he calls the "deep discounts", is to increase computing power on



English professor Ian Lancashire has become so enamoured of computers that he takes one on the subway so that he can work while he rides (and other passengers stare). "One develops strong feelings about the tools one uses," he says. See story on page 5.

campus and to move as many uses as possible off the central mainframes so that they can become more specialized research machines. "It's part of our computer strategy to decentralize computing as much as possible," says Nowlan, "both because it's cheaper and because we need more computing power on campus."

University of Toronto Computing Services (UTCS) has a microlab equipped with one of every type of machine on the discount deal for prospective buyers to try out. Two microsystems consultants are available to give advice on the type of machine that would best suit a particular person's needs. A consultation is included in the discount package, but there will be no free lessons in the use of microcomputers at UTCS. Purchasers are expected to sit down with the manual and become familiar with the machines

on their own. "If people need a lot of support, they shouldn't buy through this plan," says UTCS microsystems consultant Grant Davis.

Purchasers who find themselves intimidated by their machines can take heart in the knowledge that a 10-week course of two hours a week is offered periodically through the School of Physical & Health Education for about \$125. "Microcomputers for Absolute Beginners" teaches programming and common uses of the machine with hands-on experience. (More information can be had from Ed Thompson at 978-4810.) UTCS director Warren Jackson expects that new services will be offered as needs make themselves felt. "We're going to be pretty demand-driven. We might start giving courses in micro software, but probably people would have to pay for the convenience of not teaching themselves."

UTCS is expecting to be able to cope with the increased demands for advice. "We suspect that things will go fairly well," says Jackson, "and if things start going out of control we'll try to keep giving a reasonable level of service and make a case for increasing resources. We would prefer not to give more and more people less and less service."

Governing Council approves plan to redevelop McMaster Hall

Governing Council May 17 gave the go ahead for redevelopment as a hotel of McMaster Hall, which houses the Royal Conservatory of Music, and the adjacent site.

The development would have to provide for the replacement of the Conservatory's facilities near the Faculty of Music and for an interim location if McMaster Hall has to be vacated before the new premises are ready.

Elizabeth Pearce, chairman of the Planning & Resources Committee, said approval would not be considered final. When a specific proposal for a participating ground lease is received, the matter will again be brought to Council.

"Surely this is not a blank cheque to support what could turn out to be a visual horror," said alumnus Eric Hardy. "If we accept anything that's thrown at us we'll live to regret it."

Government appointee Joanne

Strong said it was important for the Council to retain the right to approve the design.

"This is a facilitating resolution only," said chairman John Whitten. "I don't think there's the slightest possibility that we'll find ourselves the owners of property on which there's a ghastly monstrosity. We may make a mistake, but we'll make it by approving it ourselves."

Government appointees Mary Kent and St. Clair Balfour argued that the property should be cleared before it was offered for redevelopment. McMaster Hall is not worth retaining, said Kent, because it is not architecturally significant. Though the

Continued on Page 2

Next Bulletin

The next issue of the *Bulletin* will be published June 11. The deadline for events is *Monday, May 28*. For editorial material, the deadline is *Friday, June 1*.

Building to be named for Bissell

The building that houses the Faculty of Library & Information Science is to be named for U of T President Emeritus Claude Bissell.

Governing Council has approved a recommendation that the building at 140 St. George St. be named the Claude T. Bissell Building. A ceremony to mark the event will take place in the building's lecture theatre at 11 a.m. on Tuesday, June 12.



CRYSTAL'S FLOWER MART

Mon - Thurs 10 a.m. - 10 p.m.
Friday 10 a.m. - 11 p.m.
Saturday 9 a.m. - 11 p.m.
Sunday 9 a.m. - 7 p.m.

Cut flowers & house plants
Silk and dried flowers

Lowest Prices Guaranteed
Delivery over \$15

927-8730

366 Bloor St. W.




NEW

MASTER CHEF Restaurant

517 Bloor St. W.
Phone: 534-3351

Traditional Hungarian Food
Daily Specials
Reasonable Prices
Fully Licensed
Open daily
for lunch & dinner



Don Quijote

RESTAURANT ESPAÑOL



NEW FROM SPAIN!

**AUTHENTIC FLAMENCO
DANCERS**

and live Latin American
music nightly

Finest Spanish & International Cuisine

LUNCH & DINNER
12 noon - 3 p.m.
5 p.m. - 1 a.m. 7 days

300 College St.
922-7636

Reservations recommended



Estonian chair approved in principle

The endowment of a chair in Estonian studies was approved in principle at the May 10 meeting of the Academic Affairs Committee. However, the motion was referred back to the administration for more information.

The Council of the School of Graduate Studies (SGS) has approved the proposed gift. The position would be focused on research and development of the area of Estonian studies, which could include language and

literature, history, political economy, ethnography or other fields linked to the study of the culture, language, social structure, political or ethnic relations in the Baltic area and in Canada. SGS has recommended that the chair be attached to the Centre for Russian & East European Studies (CREES) and that visiting professors define the character of the position over the first several years. The visiting professors would be selected

by an advisory committee comprising the director of CREES, a member of the Estonian community who is on the faculty of U of T, an associate dean of SGS and one other faculty member.

The committee asked whether the sum to be given for the project would be adequate. The funds would consist of \$700,000 from the Estonian community, a possible \$300,000 that has been applied for as a grant from the Department of the Secretary of State, and another \$100,000 to be raised by Tartu College.

The committee expressed concern that the appointment was for graduate research only and would not involve teaching. Concern was also expressed about the validity of the academic field. When the Chair in Ukrainian Studies was endowed in 1979, the field already existed at other universities. The committee asked for assurance about the academic validity of Estonian studies and information on the selection process for the appointment to the chair.

Bulletin, public relations win CASE awards

The University of Toronto *Bulletin* has won two awards in the 1984 recognition competition sponsored by the Council for Advancement & Support of Education (CASE). A citation was awarded in the category that judged content, writing, appearance, print quality and use of resources.

Photographer Steve Behal received a special merit award in the photo-communications competition.

U of T's Public Relations Office won an exceptional achievement award in

the research communications competition. The category recognizes outstanding programs of research communication through the news media. The competition evaluated writing, explanation of research activities and their impact, and visuals if appropriate.

CASE encompasses everyone working in higher education in all areas of institutional relations. It has 2,400 member institutions and 9,000 individual members in Canada and the US.

Governing Council

Continued from Page 1

building has been designated by the Toronto Historical Board, it is legally possible to apply for permission to demolish it and then do so after 270 days, Dan Lang, assistant vice-president (planning) and registrar, told Council. However, it would be inadvisable because the University has made a commitment to the city to "respect" its buildings.

Professor Dorothy Smith of the Ontario Institute for Studies in Education, which is located across the street on Bloor West, objected that the ecology of the University was being disturbed. She would feel uncomfortable at the invasion of the campus by "quite different forms of life".

Council also approved revision of the cost of the Koffler Student Services Centre project from \$8 million to \$8,714,800 and the selling of a debenture of \$3.2 million for University of Toronto Press to finance the move of the Bookroom and Textbook Store there.

Professor Kenneth McNeill protested that the University should not

be saddled with the debt of ancillaries. He feared that the bookstore would not make money.

Alumnus Burnett Thall, chairman of the Business Affairs Committee, replied that conservative projections show the bookstore not only making money but eventually accumulating a surplus. He said there is a misconception that ancillaries do not make a profit. A report has been prepared for his committee by the administration on the policy of profits for ancillaries.

Increases in fees paid by students for the Health Service (from \$18.50 to \$23.50) and the Department of Athletics & Recreation (from \$52.50 to \$55.00) were approved despite a suggestion from undergraduate Kevin Nightingale that students be allowed to register without the privilege of participating in college or athletic activities if they cannot afford the peripheral fees.

A plan to delegate the approval of the University's response to the Bovey Commission to the 1984-85 Executive Committee was approved. President David Strangway said a position paper has been circulated to principals, deans, directors and chairmen, who have been asked to discuss it with the faculty. The president and the provost, Frank Iacobucci, will meet leaders of the University of Toronto Faculty Association, the University of Toronto Staff Association and student associations to get their views on the paper.

In the president's report, Strangway said the establishment of a new athletic league for 1985-86 is being discussed by U of T, the University of Western Ontario, Queen's and McGill.

He also reported that he had attended a meeting of the recently formed Corporate-Higher Education Forum along with other university presidents and chief executive officers. "There is a tremendous amount in common between the two sectors," he said.

Ignatieff to receive honorary degree

Chancellor George Ignatieff will be awarded an honorary Doctor of Laws degree from the University of Victoria at Convocation ceremonies June 2.

Ignatieff became Chancellor of U of T four years ago. A Canadian diplomat and public servant since 1944, he has served as ambassador to Yugoslavia, permanent representative of Canada to NATO, adviser of the Canadian delegation to the UN assembly, and permanent representative of Canada to the Disarmament Committee in Geneva. Since 1973, he has been chairman of the board of trustees of the National Museums of Canada, governor of Heritage Canada, and president of the United Nations Association in Canada.

UNIVERSITY OF TORONTO Bulletin

Editor: Norma Vale
Writer: Judith Knelman
Copy Editor: Margaret MacAulay
Editorial Assistant: Cathy Kingdon
Production Coordinator: Chris Johnson
Layout and Typesetting: Sandra Sarner
Photography: Steve Behal
Advertising: Marion de Courcy-Ireland
Material may be reprinted in whole or in part with appropriate credit to the *Bulletin*.

Published every two weeks by the Department of Communications.

Submissions for publication must be in the *Bulletin* office, 45 Willcocks St., University of Toronto, Toronto, M5S 1A1, 10 days before publication date unless otherwise specified.

Display advertising space must be reserved two weeks before publication date.

Advertising enquiries: 978-4933

Member of the University Newspapers Group.



Research exhibition

U of T President David Strangway and Minister of Colleges & Universities Bette Stephenson chat at the official opening earlier this month of Research for Living, an exhibition of 30 current U of T research projects and, in Stephenson's words, "the perfect celebration of the bicentennial of the province of Ontario". The exhibition, on view in the foyer of the Robarts Library until June 25, shows the impact of research on everyday life.

COU studies applicants who don't register

The Council of Ontario Universities (COU) is conducting a \$22,500 study of what happens to people who apply to a university but do not register.

The study of applicants for admission in the fall of 1983 was initiated to clarify the situation after reports last summer that large numbers of qualified applicants were being turned away.

The first phase of the study which identified the number of qualified people who did not register has

already been completed. The people so identified will now be telephoned by a research firm and asked whether they in fact received an offer of admission and why they did not act on it.

Results of the survey will be released by late summer, says COU's director of communications, Will Sayers.

The Bovey Commission and the Ministry of Colleges & Universities are each providing \$7,500 for the survey. The remainder will be paid by COU.

U of T/Korea agreement signed for joint studies in nuclear engineering

The University of Toronto has signed an agreement with the Korea Advanced Institute of Science & Technology in Seoul to conduct joint studies and research in the field of nuclear engineering. Research will be in such areas as nuclear reactor safety and control, reactor thermal hydraulics, reactor systems design and operation, and fuel and waste management technology.

The agreement provides for exchanges of faculty members, graduate students and research staff.

"Korea started up a CANDU power plant last year, so they want to re-orient their programs to Canadian approaches," says chemical engineering professor Robert Jervis, chairman of the Research Board. Jervis, who went to Korea for discussions about the exchange, says Korea has agreements with Canadian government and industry, but this is their first at the university level.

Budget gives U's \$42 million but cuts share of total

Though Provincial Treasurer Larry Grossman's first budget gives notice of a plan to reduce government spending, universities have been promised a \$30 million Research Incentive Fund to be spread over three years and a network of innovation centres to stimulate the commercial production of university inventions.

However, Bill Jones, president of the Ontario Confederation of University Faculty Associations, says the announcement is "repackaged public relations rather than actual substance". The global operating grant already announced for 1984-85, \$1,185.5 million, is 4.4 percent of the estimated total expenditure by the province for next year, he calculates. That means the universities' share will actually drop by .1 percent from what it has been for the past three years, he says, a loss of about \$20 million.

The fund is for the acquisition of high-technology equipment for research that meets the demands of the economy. For two dollars of investment from the private sector the government will provide one dollar. Since the \$30 million is for three years, Jones calculates that instead of the extra \$20 million in operating grants the universities would have got had they held on to last year's share they get a possible \$12 million.

The budget commits another \$30

million for capital expenditures. These include innovation centres in selected universities and colleges to link business and academic communities. These have been designated as part of the Board of Industrial Leadership & Development (BILD) program.

Reception to be held for retiring staff

President David Strangway is holding a reception for all those members of the academic and administrative staff who will be retiring at the end of this academic session. It will be held in the Music Room of Hart House on Wednesday, May 23 from 4.30 to 5.45 p.m.

These events have been greatly appreciated by the retiring staff members and have been attracting an increasing number of University colleagues. All members of the University community and families and friends of the honoured guests are cordially invited to attend.

New office to provide printing and design services

U of T Press has merged its Printing Services Centre and Design Unit to form a new office that will provide complete services for printed communications in one location.

Laurie Lewis, head of the Design Unit and manager of the Publications Design Department since 1978, will become manager of the new Campus Printing & Design Office. Lewis, a professional member of the American Institute of Graphic Arts and a fellow of the Society of Graphic Designers of Canada, has won many national and international design awards. She has

been responsible for design programs for the Centre for International Studies, Innis College and the Office of Admissions.

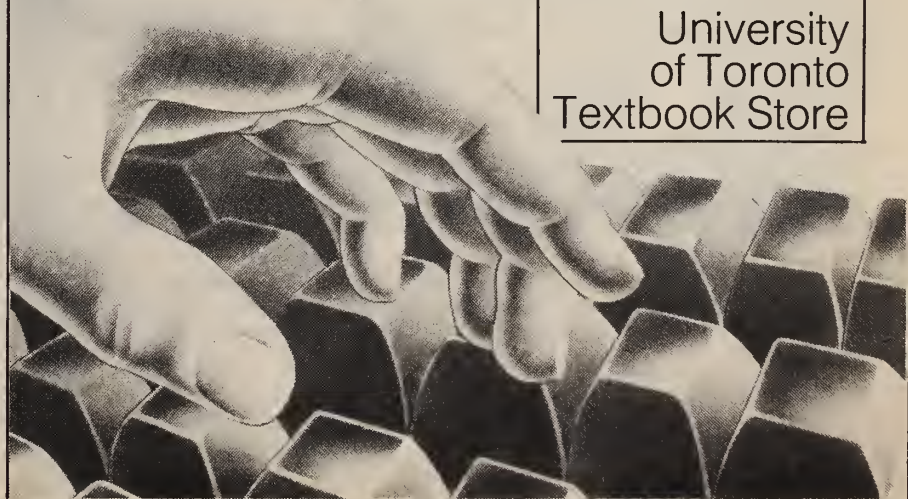
The printing and design office will provide full printing production services, assistance with estimates of costs for budget planning and preparation of advance schedules to meet deadlines and design, writing and editing services.

A free consultation is available to University divisions. For more information call 978-2317.

The Computer Shop and Textbook Store

at 280 Huron Street
is now open on Saturdays
from 11 a.m. to 5 p.m.

University
of Toronto
Textbook Store



Research News

Aid to Learned Journals in the Social Sciences and Humanities

The moratorium on the learned journals program of the Social Sciences & Humanities Research Council has been extended for one more year to June 1985. The council indicates that it will continue its review of the use of new technology to aid research communication and will proceed to a full evaluation of the journals program so that a revised program will be ready for introduction in 1985.

Learned journals presently receiving SSHRC support will continue to do so, subject to the availability of funds, for the period ending Dec. 31, 1985.

Impact of Computers on Education

Participation is invited by the Ontario Ministry of Education and Ministry of Colleges & Universities in a program of research which will focus, in phase one, on the impact of computers (mainly microcomputers) on education in the elementary, secondary and post-secondary sectors.

The deadline date for a response to this invitation is June 15. Further information may be obtained from ORA at 978-2163.

Upcoming Deadline Dates

Canada Council — writers-in-residence, applications from host institutions: May 31.

National Institutes of Health (US) — competing continuing and supplemental grants: June 1.

SSHRC — strategic grants: June 1; travel grants for international representation: four months before meeting; aid to occasional scholarly conferences in Canada (Oct. to Feb. conferences): June 30.

PhD Orals

Since it is sometimes necessary to change the date or time of an oral examination, please confirm the information given in these listings with the PhD oral office, telephone 978-5258.

Friday, May 25

Brenden Wong, Department of Physics, "Quantization on the Hypersphere." Prof. P.J. O'Donnell. Room 309, 63 St. George St., 2 p.m.

Monday, May 28

Michael Alexander Sirisko, Faculty of Dentistry, "Motor Cortical Control of the Face, Jaw and Tongue in the Macaca Fascicularis." Prof. B.J. Sessle. Room 309, 63 St. George St., 2.30 p.m.

Thursday, May 31

Christiane Kegel, Department of French Language & Literature, "Fiction et Scriptibilité: l'Exemple de Giono." Prof. R. Le Huenen. Room 111, 63 St. George St., 10 a.m.

Kai Huei Chang, Department of Physics, "A Charge Spectrometer for Quark Searches." Prof. A.E. Litherland. Room 309, 63 St. George St., 2 p.m.

Friday, June 1

Ying-Guey Fuh, Department of Physics, "Photorefractive Studies in Liquid Crystal Films." Prof. R.F. Code. Room 301, 65 St. George St., 9.30 a.m.

Michael Kaufman, Department of Political Science, "Jamaica under Manley, 1972-1980: The Limits of

Social Democratic Reform." Prof. J. Barker. Room 309, 63 St. George St., 9.30 a.m.

Patrick Rudolph Deutscher, Department of Economics, "R.G. Hawtrey and the Development of Macroeconomics in the Interwar Period." Prof. D.E. Moggridge. Room 111, 63 St. George St., 2 p.m.

Monday, June 4

Itzhak Geva, Department of Civil Engineering, "Estimation of Origin-Destination Flows from Traffic Counts and Small Sample Surveys." Prof. E. Hauer. Room 309, 63 St. George St., 10 a.m.

Tuesday, June 5

Alaa El Din Ismail Serry, Department of Computer Science, "Analytical Approach to Modelling IMS Systems." Prof. K.C. Sevcik. Room 309, 63 St. George St., 10 a.m.

Gail Landau Reisman, Department of Education, "Life Themes in the Lives of Two Exceptional Women as Revealed in Their Personal Documents." Prof. R. MacIntyre. Room 111, 63 St. George St., 2 p.m.

Friday, June 8

Ava Inez Weinberger, Department of English, "The Middle Eastern Writings of James Morier: Traveller, Novelist and Creator of Hajji Baba." Prof. G.E. Bentley, Jr. Room 309, 63 St. George St., 10 a.m.

Monday, June 11

Roma Chumak Horbatsch, Department of Education, "Language in the Ukrainian Home: Its Use in Ten Toronto Families Attempting to Preserve Their Mother Tongue." Prof. M. Swain. Room 309, 63 St. George St., 10 a.m.

Tuesday, June 12

Richard Paul Bozzato, Department of Biochemistry, "Phospholipid Transfer Proteins in Bovine Liver and Yeast: Regulation of the Transfer Reaction by the Membrane Interface and the Search for a Functional Role." Prof. D.O. Tinker. Room 309, 63 St. George St., 10 a.m.

John Wren Medcof, Faculty of Management Studies, "Observers Attributions about Administrative Behaviour." Prof. M.G. Evans. Room 301, 65 St. George St., 10 a.m.

Richard Allan Sokoloski, Department of Slavic Languages & Literatures, "The Poetry of Mikolaj Sep-Szarynski: An Introduction and Critical Translation." Prof. L. Iribarne. Room 111, 63 St. George St., 10 a.m.

Job Openings

Below is a partial list of job openings at the University. Interested applicants should read the Promotional Opportunity postings on their staff bulletin boards, or telephone the Personnel Office for further information. The number in brackets following the name of the department in the list indicates the personnel officer responsible. Please call: (1) Sylvia Holland, 978-6470; (2) Steve Dyce, 978-5468; (3) Jack Johnston, 978-4419; (4) Elaine Preston, 978-2112; (5) Christine Marchese, 978-4834.

Clerk Typist II

(\$13,460 — 15,840 — 18,220) Law (3)

Clerk Typist III

(\$14,820 — 17,440 — 20,060) Pharmacology (5), Biochemistry (5)

Clerk III

(\$14,820 — 17,440 — 20,060) Graduate Studies (1), Continuing Studies, part-time (4)

Secretary I

(\$14,820 — 17,440 — 20,060) Hart House (2)

Secretary II

(\$16,300 — 19,180 — 22,060) Pharmacology, 50 percent full-time (5), Comptroller's Office (3)

Secretary III

(\$18,160 — 21,360 — 24,560) Mathematics (4), Guidance Centre (3)

Keypunch Operator II

(\$14,820 — 17,440 — 20,060) NCIC Epidemiology Unit (1)

Laboratory Technician I

(\$14,820 — 17,440 — 20,060) Clinical Biochemistry (2)

Laboratory Technician II

(\$18,160 — 21,360 — 24,560) Clinical Biochemistry (2), Pathology (2), Medicine (2), Preventive Medicine & Biostatistics, 50 percent full-time (1), Nutritional Sciences (5)

Engineering Technologist I

(\$17,240 — 20,280 — 23,320) Central Services (2)

Engineering Technologist III

(\$23,510 — 27,660 — 31,810) Physics (4)

Programmer Analyst II

(\$22,260 — 26,190 — 30,120) U of T Press (3), Computer Systems Research Group (4)

Programmer Analyst III

(\$27,430 — 32,270 — 37,110) Management Systems & Analyses (3)

Systems Software

Programmer II

(\$27,430 — 32,270 — 37,110) Computing Services (3)

Library Technician IV

(\$14,820 — 17,440 — 20,060) Media Centre Audiovisual Library (5)

Research Officer II

(\$20,050 — 23,590 — 27,130) Social Work (5)

Personnel Officer II

(\$28,920 — 34,020 — 39,120) Personnel (4)

Public Relations Officer

(\$28,920 — 34,020 — 39,120) Communications (Public & Community Relations) (2)

TV Maintenance Technician II

(\$21,200 — 24,940 — 28,680) Media Centre (2)

Archivist

(\$30,440 — 35,810 — 41,180) Roberts Library (3)

Executive Assistant to the Assistant Director, Finance

(\$35,730 — 42,030 — 48,330) U of T Press (3)

In Memoriam

Dr. John Palmer, Department of Surgery, May 1.

Palmer, who was 58, grew up in Meaford, Ont., received his MD in 1948 from the University of Toronto, and completed his internship at Toronto General Hospital in 1949. After two years in family practice, he returned to U of T in 1951 as a surgical resident and completed the Gallie course in surgery in 1956. He spent the next two years as a

Nuffield Fellow in Surgery in Edinburgh and London. He became a staff surgeon at Toronto General Hospital in 1958 and joined U of T the same year. He was a consultant surgeon to the Princess Margaret Hospital and the Ontario Cancer Institute.

Among his interests were surgery of head and neck malignancy, endocrine glands and general surgical oncology.

Along with Dr. Errol

Marliss and Dr. Charles Hollenberg, Palmer helped develop an operation that involved stapling off part of the upper stomach in obese patients.

An avid sportsman, Palmer was for many seasons team physician for the Toronto Maple Leafs and the Toronto Argonauts. He was also an accomplished landscape painter, with yearly shows at a Toronto gallery.

Recommended dining

MASA

Enter through a Japanese rock garden which sets the scene for gracious, relaxed dining in the Oriental tradition, surrounded by wicker, bamboo, and Japanese prints. You can dine Japanese style at low tables or, if you prefer, North American style with normal tables and chairs—



the service is efficient and polite no matter which you choose. Five course dinners present a selection of *sukiyaki*, *teriyaki*, *shabu shabu*, or *yosenabe* as the main course. The latter is prepared in a wok right at your table and consists of seafoods, vegetables and tasty seaweed. The main course is accompanied by soup, sunomo salad (octopus, cucumber and shrimp), tempura, rice, dessert, and tea. AmEx, Chgx. 195 Richmond Street West. 977-9519. Noon-2:30 5 p.m. to 11 p.m. Mon.-Fri. Sat. 5 p.m. to 11 p.m. Closed Sunday. ★★★★★

Authentic Japanese Food

Michi

みち

JAPANESE RESTAURANT

459 Church Street

924-1303

• Licensed

Masa

dining lounge

Authentic Japanese cuisine & decor . . .

195 Richmond St. W. (within walking distance of all Downtown Hotels) Phone 977-9519

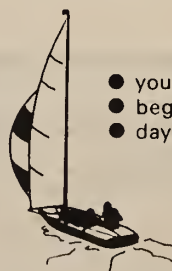
MICHI

Bamboo screens, sliding glass panels and low tables provide the setting for the gentle, graceful art of Japanese dining. Complete dinners include *sukiyaki*, the *sakura* dinner which has *teriyaki* for the main course, and the *ushio nabe* fish pot dinner. The latter is a tour de force served in



a big iron pot which is kept hot at your table. The ingredients are boiled shrimps, lobster tail, crab legs, scallops, white fish and fish cake, green vegetables, and bonito stock. Soup, appetizer and dessert are included. Vegetarians will like the *shyo-jin-ryori* complete dinner—a fascinating melange of crisp oriental vegetables. There is accommodation for parties of four or more. Licensed. AmEx, Chgx. 459 Church Street, 924-1303. Noon-2:30 5 p.m. to 11 p.m. Mon.-Fri. Sat. 5 p.m. to 11 p.m. Closed Sunday ★★★★★

LEARN TO SAIL



- youth/adult
- beginner/advanced
- days/evenings

at SAIL TORONTO

A SAIL ONTARIO SCHOOL Operated by the Provincial Sailing Authority



PHONE: 495-4240 office 495-4238 office 461-6268 site

Computers are for humanists too,

says Erindale English professor

by Judith Knelman

Ian Lancashire, who teaches English at Erindale College, has so little mechanical ability that he leaves home repairs to his wife, Anne, acting chairman of the University's Department of English. But when he made the acquaintance of a computer in 1977 on the Records of Early English Drama (REED) project, it was love at first sight. He has not become an expert on computers, but he has developed a few short routes that suit his particular purposes, which include text analysis and language simulation. "Once you get a little bit of help you become curious and look for more," he says. He has gone far beyond word-processing, establishing and manipulating data bases in his field, drama to 1660, writing a book on computer applications in literary studies for a graduate course he set up and even doing programming, though he tends to leave that to computer specialists. Now, totally addicted, he travels the subway with a Radio Shack model 100 notebook computer bought for use in libraries, entering letters, memos and bits of books while he has a few spare moments.

He's proud to say that his 359-page student handbook, crammed full of explanations, demonstrations and programs, took just 130 days from the time he thought of it to the day he gave it out to his students. He did it on a DEC 1090 using SOS and SCRIBE. A scholarly book, *Dramatic Texts and Records of Britain*, took about three years, half the time that would have been required without a computer. "I felt that I could change everything right up to the last moment," he says. "It was tremendously liberating." Even indexing, a task dreaded by

authors, was pleasant if not downright enjoyable.

The attraction of a computer to an academic, says Lancashire, is that it puts perfection within reach. "It has a memory and it lets you change words. It's a remarkable development. Remember, the computer is only the second tool that humanists have had, the first being the printing press. To a scientist, it's just another tool. But when you haven't had one for 500 years it's different."

The chance to work on a computer is not only exciting to a group that has never been offered a completely new tool, but also intimidating. For one thing, there's the ordeal of adapting, learning a process and the relevant capabilities. There is also nervousness about spending a lot of time and money on something that could turn out to be essentially a toy. And there is the problem of working with colleagues who refuse to accept the computer as a serious research tool. At REED, six years elapsed before the entire operation was computerized, only partly because of the expense. Computers have had a bad reputation in the humanities, says Lancashire, because they have always failed to live up to the claims of the greatest enthusiasts. Consequently, serious people working with them have endured scepticism for many years.

The computer is a toy, but it is much more than that. Lancashire is fascinated with its ability to manipulate words and create dialogue, not for its amusement value but for the light it sheds (by contrast) on the genuine creative process. More important, its extension of the capacities of the human mind allow a scholar to see details of artistry that ordinarily are

invisible to someone engrossed in the broad expanse of a text. Databases assemble information that is repeated in a text, revealing patterns that might otherwise go unnoticed. "The computer doesn't say, 'This is the truth,'" says Lancashire. "But it does say, 'Is this the truth?'"

Promoting the use of databases and textual analysis, Lancashire shows his students a word frequency chart of speakers in some poems by T.S. Eliot. Highest on the list of most frequent content words in J. Alfred Prufrock's speech are "time", "known", "say" and "go". The lady in "The Portrait of a Lady" speaks most often of friendship, life and endings and uses "you" more often than "I"; in her friend's speech, "I" is among the 10 most frequent words, but not "you", and "die" and "begins" are favourite content words. Similarly, a neat table of Othello details the frequency and length of the main characters' speeches for anyone who wants to study patterns of behaviour.

For word processing, Lancashire thinks the computer is invaluable to humanists. So last year, undergraduate English students at Erindale were invited to become familiar with the computer. The department ran a few seminars for English majors and specialists and let them loose on a VAX 780. "I can't say that more than 10 or 15 percent of them use it, but those that use it really use it," he says. "They find they can save a tremendous amount of time. And it makes them better writers. They can afford to be totally satisfied with an essay before they hand it in."

He's also noticed that colleagues record marks, type out lengthy commentaries on student essays, collect information and even keep financial records on their own computers. The department has three notebook computers, five microcomputers and two terminals, one hooked up to the University's mainframe. The number of English professors who rely on computers to help them with their research and writing is growing. That is just as well, since Lancashire thinks the day is not far off when scholars will routinely publish right from floppy disks, in effect doing the typesetting themselves.

One of his most rewarding moments occurred last spring when then President James Ham, an engineer, designated money raised by the Presidents' Committee for the complete computerization of REED and the *Dictionary of Old English*, two longstanding humanities projects that had demonstrated their need for what is generally regarded as the scientists' tool.

Party to meet Ustinov, support theatre

A "strawberries and champagne" fund raising party to support the drama centre's new theatre in the Koffler Student Centre, with Peter Ustinov as the guest of honour, will be held from 5 to 6.30 p.m. in the Provost's Lodge, Trinity College, on June 18. Ustinov will receive an honorary degree from U of T earlier in the day.

Tickets for the party are \$50 per person (a portion of which is tax deductible) and are available through the Department of Private Funding, 455 Spadina Ave., suite 305, 978-2171.



US ambassador at Hart House

Warden Richard Alway (right) greeted Paul Robinson, Jr., US ambassador to Canada, at Hart House May 10. Robinson was at the House to give the 12 volumes of the Library of America Series to the Hart House Library as a gift of the US embassy. The series of beautifully bound and printed editions of classics of American literature began publication in 1982, funded by the National Endowment for the Humanities and the Ford Foundation. Four volumes are published every spring and fall.

Women's group to run gift shop

A gift shop selling University of Toronto mementos will open this fall in the lobby of Simcoe Hall as a project of the U of T Women's Association (UTWA).

To be staffed by volunteers, the shop will also sell arts and crafts made by association members. Profits from the U of T items, which will be supplied by the Bookroom, will go toward scholarly publishing. A second beneficiary is still to be determined.

Membership in the UTWA is open to

all faculty wives/women. Association projects this year included a dinner and theatre evening and coffee mornings at the Faculty Club to welcome new members of the University community. A contribution was made from money raised to WIT (Women in Toronto) for celebrations marking the 100th anniversary of the admission of women to U of T.

For more information on the association and the shop, telephone Marjorie Ivey at 444-4844.

TOBERMORY LODGE AND MOTEL RESORT

Waterfront Location
Overlooking Tobermory Harbour

- 39 Motel Units
 - 9 Chalet Units
 - 5 Cottages
- (colour T.V. in all units)
FREE HBO IN ROOM MOVIE CHANNEL

Heated Swimming Pool

Tennis Courts
Opening Mid-June

Licensed Dining Room
Open Daily: 7 a.m. to 9:30 p.m.

- * All major credit cards honoured
- * American plan available

Courtesy Shuttle Service to Ferry

P.O. Box 69, Tobermory,
Ont. N0H 2R0

Phone 519-596-2224

Scarborough Campus UNIVERSITY OF TORONTO

COMPUTER SCIENCE

Active Computer Science group requires full-time or sessional tutor for first year tutorials and grading, and possibly some lecturing. B.Sc., preferably in Computer Science, and familiarity with the PASCAL or TURING language, required. Salary commensurate with qualifications and experience. Send curriculum vitae to:

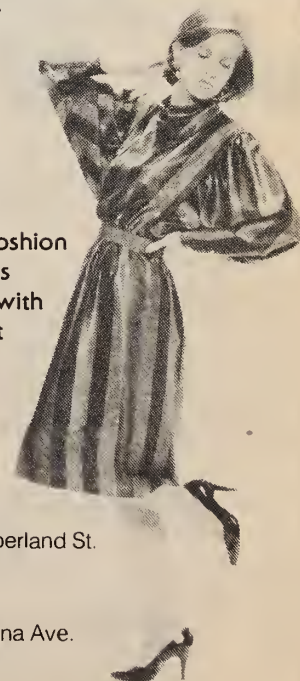
Professor John Perz
Chairman
Physical Sciences Division
Scarborough Campus
University of Toronto

Freda's

Couturier
Fashions

Original
Designs
in Fine
Fabrics

For the Fashion
Conscious
Woman with
a Budget
in Mind



110 Cumberland St.
2nd Floor
921-9913

300 Spadina Ave.
593-0380

20% discount with this ad

Committee Highlights

The Planning & Resources Committee — April 16, 1984

- recommended approval of the 1984 U of T brief to the Ontario Council on University Affairs (OCUA). Because of the Bovey Commission, OCUA's intention to call for briefs and the regular schedule of spring meetings have been altered. The brief contained the annual report on graduate programs and, at the invitation of the OCUA chairman, comments on the deterioration of physical plant assets
- recommended the following:

1. That McMaster Hall and the site adjacent to it be commercially developed to provide funding for replacement facilities for the Royal Conservatory of Music and to generate revenue for the University at large
2. That the development fully conform to the General Principles to Guide the Development of University Property
3. That the redevelopment be in the form of a hotel
4. That the form of contract be a participating ground lease
5. That the development:
 - a. Make satisfactory financial provisions for the replacement of McMaster Hall and provide a new facility which meets the space requirements of the Royal Conservatory of Music's current programs and enrolment
 - b. Provide a new facility for the Conservatory before it must vacate McMaster Hall. A short period of rental accommodation may be considered
 - c. Locate the new facility near the Faculty of Music

and on a site accessible to Conservatory students

6. That if the University's administration wishes to consider a proposal or proposals that do not fully meet the requirements set out in the previous five items, the variances be submitted to the Governing Council through the Planning & Resources Committee for review and consideration. If there are no variances the detailed proposal be submitted to the Governing Council through the Business Affairs Committee for review and consideration and to the Planning & Resources Committee for concurrence

- recommended approval of revisions to the policy on the use and development of computer services at U of T
- approved the planning and resource implications for the Scarborough College cooperative programs in arts administration and in international development studies, provided that the college maintain planned levels of fundable enrolments
- approved the membership of the 1984-85 striking committee: Elizabeth Pearce, Professor V.G. Smith, Principal Peter Silcox, St. Clair Balfour, John Ryder-Burbidge

The Committee on Campus & Community Affairs — April 24, 1984

- recommended two non-academic incidental fee changes for 1984-85:
 - i) University Health Service, from \$18.50 to \$23.50
 - ii) Department of Athletics & Recreation, from \$52.50 to \$55.50
- approved the following compulsory non-academic incidental fee changes for

1984-85:

- i) Erindale College Athletic & Recreation Association, from \$30.50 to \$33
 - ii) Wetmore Hall Residence Council, from \$7 to \$9
 - iii) University College Literary & Athletic Society, from \$15 to \$21 for full-time students and from \$5 to \$7 for part-time students
- approved the appointment of Dr. David Smith as director of the University Health Service, effective July 1, 1984
 - approved the 1984-85 Operating Plan of the Department of Athletics & Recreation. The plan proposes the continuation of current programs and is consistent with the five-year planning forecast 1982-87 approved by Governing Council in May 1982. One major change in the department's budget is that the amount annually transferred to the budget of physical plant for maintenance of the athletic complex has, for the first time, been placed directly in the physical plant budget, causing a decrease of \$680,000 in the department's budget. A second major change is in the method of covering salary increases. In the past, these have been paid entirely by the University; in future, they would be funded by the base budget and the department's other revenues in the same proportions as the funding for the department's total expenditure. The director of the department reviewed the plan and cautioned that any attempt to make the department's programs self-sufficient would seriously affect the nature of the programs. The budget included

\$96,000 for salary increases and he noted that a salary increase of greater than five percent would be disastrous. A member expressed concern about the financial future of the department. The director agreed there was cause for concern and stressed that athletics should be viewed within an educational context and not as a service. He suggested that the current split in financial responsibilities was workable but any further erosion in the base budget amount would be disastrous. He suggested that a contingency fund be initiated, similar to those at other Ontario universities. The U of T department, with 29 percent of its funding provided through the University, was at the low end of the scale compared to other Ontario departments, some of which received up to 50 percent of their funds from the central budget

- received a report for information on student society

accommodation costs

- approved membership of the 1984-85 striking committee: Professor Chaviva Hosek, Marija Hutchison, Mary Kent and Joanne Uyede
- a notice of motion was presented that the 1984-85 percentage increase in fees for the Innis College residence be the same as that applied to the University College and New College residences (approximately seven percent) and not the 8.3 percent approved by the committee March 20, 1984. The Innis College principal addressed the committee, noting that the Innis residence was a small, old building erected in the 1890s and that economies of scale in a 40-person residence were not possible. He objected to a larger percentage increase in fees based on the financial necessities caused by individual buildings.

The assistant vice-president — services shared

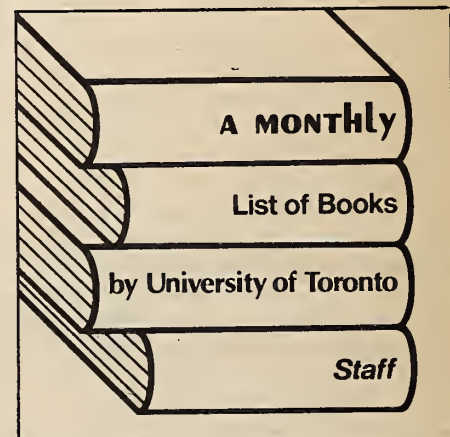
the principal's concern about residences. He said all need maintenance and modernization. A working group has been established to identify and cost items of maintenance and renovation. He outlined the method used to draft the budget for residences, noting that meetings had been held with representatives of the residences in the formative stage; later, colleges were invited to meet individually with the administration and discuss the proposed budgets. Only New College accepted the invitation. He said fees were lower at Innis than at other colleges and that on a per-bed basis the provision for non-recurring maintenance is 47 percent higher at Innis than the average. A six-year comparison of percentage increases in fees revealed that Sir Daniel Wilson and Innis residences had increased an identical amount

Books

May

The Origins of Christianity: A Historical Introduction to the New Testament, by Schuyler Brown (Oxford University Press; 169 pages; \$11.50). This historical introduction to the New Testament investigates the foundation of the new religious movement in the life of Jesus, the experiences which acted as the catalyst of missionary activity after His death, the factors which led to a separation of the movement from Judaism, and the development of the ecclesial structures through which Christianity has influenced subsequent secular and religious history.

The Oxford Poems of Hugh Primas and the Arundel Lyrics, edited by C.J. McDonough (The Pontifical Institute of Mediaeval Studies; 134 pages; \$4.75). This book contains an edition of two of the most outstanding and vivacious Latin poetic anthologies from the 12th century. Hugh Primas, whose poems deal with classical and contemporary "Goliardic" themes, was associated with Orléans, a flourishing intellectual centre of the so-called 12th century renaissance. The Arundel Lyrics, attributed to Peter of Blois, contain love songs, Christmas poems and polemical verse. This edition, intended for university students, presents the texts based on a re-examination of the two principal manuscripts, with notes on the sources and contemporary allusions and glossaries of Latin and Old French words.



April

Robert Grosseteste *Templum Dei* (edited from MS.27 of Emmanuel College, Cambridge), by Joseph Goering* and F.A.C. Mantello (The Pontifical Institute of Mediaeval Studies; 100 pages; \$4.75). One of the most influential handbooks of practical instruction for the medieval priest, the *Templum* is a schematic summary of theological, legal and moral teachings. A striking feature of this edition is its typographical representation of the numerous charts, lists and diagrams which characterize the manuscript copies of the text. The edition also includes a historical introduction and a glossary of medieval-Latin terms.

U of T staff are indicated by an asterisk when there is multiple authorship or editorship which includes non-U of T staff.

Campus tours begin in June

Free walking tours of the U of T campus start their 10th season on June 4. The guided tours will run, Monday to Friday, until Aug. 31.

Conducted by students Carol Wells, Wendy Peace and Kathryn Zaleski, the tours start in the Map Room of Hart House at 10.30 a.m., 12.30 and 2.30 p.m.

Senior alumni assist with the hour-long tours, which are conducted in English, French and Italian.

Arrangements for group tours should be made in advance.

For more information call 978-2105, and, from June 4, 978-5000.

Pawley Lodge

A game of tennis, a splash in the pool, some fishing or the shade of a tree. Escape from the daily routine of clocks to watch and meals to prepare. Relax and enjoy as a small resort treats you to good food and friendly service.

★ ★ ★ rated

Port Severn, Ont.
L0K 1S0
(705) 538-2272

Before SAFE - T EYEGARD

they used to call it "blinding speed"



The balls in racket sports still travel up to 120 m.p.h. But now the new wrap around, unitary constructed Safe - T Eyegard has helped thousands of smart racket sport players attack the ball without fear.

There are no hinges, wires or screws to become potentially dangerous missiles by themselves. Super lightweight and form fitting with a precise pantoscopic tilt to ensure satisfactory vision through our tough plano or prescription lenses.

These are only a few of the unique safety features that have made these Canadian masterpieces the best accident insurance money can buy.

Endorsed by The Canadian Professional Squash Association



Imperial Optical Canada

Serving the Ophthalmic Professions throughout Canada and the Caribbean for over 80 years.

Encounter between missionaries and Canadian Indians examined in new book by church historian

by Randall Robertson

When John Webster Grant presented a paper at the University of Lethbridge recently on the relationship between missionaries and Canadian Indians, the white students in his audience wondered why he was so anti-missionary — and the Blackfoot Indian students accused him of being anti-Indian. That relationship, still bitter and tangled, is the subject of a book by Grant, professor of church history at Emmanuel College, to be published by U of T Press in June.

Grant, who as a young man had hoped to become a missionary himself, was inspired to write the book, *Moon of Wintertime: missionaries and the Indians of Canada in encounter since 1534*, by some of the ambiguities of the missionary's role which he noticed during a visiting professorship in India 25 years ago. "I couldn't help seeing that the Christians there had definite grudges against the missionaries from the West, missionaries who at that time were still perceived in the West as 'the great benefactors of the heathen'. I started to notice the same motifs in the story of the Indians in Canada."

The book is intended "to satisfy the need for some sort of global point of view, something at least that people can shoot at." A number of separate denominational histories and a few accounts of individual missions exist but there is nothing that discusses the bigger picture. "The real problem in this field is that there are many areas where there doesn't seem to be any interpretation of the material to start with," let alone any revisionist interpretations.

Grant contends that the missionaries were good for the Indians in the short term but that in the long run Indian expectations were rarely met. In the short term, the white missionaries helped to save the Indians from other white men. Grant points out that the missionaries usually came into contact with the Indians after the fishing ships and the fur traders — and alcohol and previously unknown diseases — had disrupted their traditional way of life. The result was a "moon of wintertime". The Indians' age-old beliefs no longer seemed to have any value and they were open to, even desperate for, outside influences.

"In the Toronto area, for instance," Grant notes, "just before the Mississauga Indians began to be in-

fluenced by the Methodist revival, there were only a few hundred of them left and it was expected they would soon all be gone. Alcohol was to blame but so was this spiritual emptiness. In getting religion, they got a new sense of purpose in life — and so survived.

"Of course when the crisis was over, they were no more or no less religious than the white people around them." But however transient their role was in filling this spiritual vacuum, "the missionaries did make the Indians feel that it was something to be an Indian. The general assumption in the 19th century was that the Indians were doomed to become extinct."

So long as the missionaries felt that they had to persuade the Indians, and to argue with them, their relations were good. Missionaries who went into the Red River area in the 19th century had to be conciliatory to the chief because without him they would never have been allowed into the Indian communities. Indeed, in the end, he actually accompanied the missionaries on their travels.

"Eventually, however, the missionaries became discouraged by the pace of conversion. They set out to speed things up by indoctrinating the children, by getting them into residential schools. This was a fatal turning point. It resulted in nominally Christian communities but there was no creative interaction of the Indians with Christianity."

The Indian parents might try to assert their authority by bargaining for clothes for their children in return for their attendance at these schools, but, says Grant, the missionaries had other, heavier demands of their own to make. They tried to make the children stay all year round — although they were not usually successful. They instituted a system of manual labour at the schools. "The students studied reading, writing and arithmetic in the morning, then worked on the mission farm — or the girls did sewing — the rest of the day. Some Indians protested against this since the children ended up providing labour for the benefit of the missions."

Grant says that he found it fascinating to observe the competitiveness of the denominations. "If you compare the records of the different missions for the same period, it's almost like having a chess board open in front of you with the pieces constantly being moved."

Although this comparative analysis is what Grant feels characterizes his book, he does provide material on individual missionaries like William Duncan. Duncan moved an entire British Columbia Indian community into what he thought was a Christian utopia. It was in fact shot through with authoritarianism and paternalism. "When you read about Duncan raising a black flag in the community if there was someone there whom he didn't



The first Methodist service at Whitefish Lake, Alta., conducted by the Ojibwa minister Henry B. Steinhauer. Typically, the few Indians there looked away from Steinhauer. They didn't like to let on that they were listening, but they were.

like — and his expecting that this would be enough to make the person get out — you can't help but feel uncomfortable."

The biggest problem, Grant says, "was always the disparity in power between Western society and the Indians" — and the arrogance that this encouraged. "The missionaries never looked to the Indians to learn what it was to be a Christian."

One reflection of this disparity is evidenced by the records that survive. "When you read what the Indians say, you are reading what a missionary or government agent says they say." But Indian dissent can be detected nevertheless. "If a missionary reports that Indian conjuring has ended, and then 30 years later, there is another report that Indian conjuring has ended, well, obviously you can tell it hadn't."

Grant believes that a creative Indian Christianity may emerge from the conflicts of today in which the Indians are insisting on being heard. "This is where history passes into prophecy, and I don't know for certain what will happen. The Indians could throw Christianity over and return to their ancestral spirits. A fair number of Indians have already become Pentecostals. But this movement is not all that open to Native insights, and the Indians may just go through the same cycle as before." A renewed self-respect may come from the achievement of political goals — a process in which, as Grant notes, a number of "repenting" churches are assisting.

Grant's book is indicative of a new sophistication in the writing of Canadian church history in recent years. "When I was starting out, books like this would have been written by retired missionaries or professors of theology. Now there are regular church historians. Rather belatedly, other historians are realizing that many things that have happened in Canadian history are difficult to understand unless you bring in the religious factor.

"Besides, there is a limit to the number of PhD theses you can write on John A. Macdonald."

An important role in this development was played by the Ryerson Press, of which Grant was editor-in-chief in the early 1960s. It commissioned a number of preparatory specialist studies in religious history, and, in 1967, coordinated a pioneering three-volume history of the Christian churches in Canada as a centennial

project. Grant was both general editor of the series and the author of one of its volumes.

This new book fills another gap, Grant feels, not least in indicating all those fresh new possible PhD theses. Ripe for the picking are the careers of individual missionaries for which there are shelves and shelves of their daily journals. Rarely was so much written by so few, Grant says. But the need for a few other general histories still continues. "One outstanding gap is something on the history of the English-speaking Roman Catholic Church in Canada. There's lots for Quebec but nothing for the rest of the country. There is also a major study of Canadian missionaries in the Far East to be done if the government funding ever became available."

Grant himself is moving on to the writing of a history of religion in Ontario. Commissioned by the Ontario History Studies Project, it will include the Indian tribes as an integral part of that history.

And the tangled relationship will remain tangled — as, for instance, when Pope John Paul visits the Shrine of the Martyrs at Midland in a few months. As Grant says, "It would be astute for the Pope to announce the canonization of Kateri Tekakwitha," the 17th-century Mohawk woman who was finally beatified in Rome in 1980. "Even in the 1930s, when the Jesuit martyrs of Huronia were canonized, there was some grumbling about why these whites alone had been picked out. Indians died for their Christian faith too."

Grant, who retires this year from Emmanuel College where he has taught since 1963, is being honoured with a symposium May 25 during the conference "Religion and Culture in Canada" being held this week. (See Events.)

**WE HAVE SPECIAL
ONE WAY,
EXTENDED STAY
AND OPEN RETURN
AIR FARES FOR YOU
AND YOUR FAMILY**

departures from Toronto

LONDON

one way from **\$299***
fixed return from **\$429**
open return from **\$579***

*via
USA

PARIS

open return from **\$648.00**

TRAVEL CUTS will make
arrangements for railpasses,
car rentals/leases, tours and
more.

Travel CUTS serving the
University Community

Going  TRAVEL
Your Way! CUTS

The travel company of CFS
TRAVEL CUTS TORONTO
U of T 44 ST. George St.
(416) 979-2406



**D. SHUTER
ROBES LTD.**

**26 Duncan St.
Fifth Floor
Toronto, Ontario
M5V 2B9
416-977-3857**

**Academic Robes
and Hoods
Authorized Robemakers
to University of Toronto**

**Faculty, Staff and Students
XEROX SPECIAL**

3¢ Per Copy

on any order above \$25.00

Offer Includes Free Cerlox Binding
and Collating for a limited time only.
Other Services Include: Offset Printing,
Xerox Color Copies, Xerox 2080 for
Engineering and Industrial Drawings

Hydery Printing

**2221 Yonge Street
(at Yonge/Eglinton Subway)
Phone - 488-5622**

International Report: 1983 University of Toronto

*Peggy L. Falkenheim
Coordinator
Office of International
Cooperation*

April 23, 1984

Introduction

During the year since the first international report was submitted to the Academic Affairs Committee, the scope and scale of the University of Toronto's international activities have broadened and increased, and several new initiatives have been undertaken. Members of the University community are implementing a number of projects funded by the Canadian International Development Agency (CIDA), the International Development Research Centre (IDRC), and other aid agencies, and a number of proposals for new projects have been submitted to them. New exchange programs with foreign universities have been started, and several more are under consideration. A number of these ties have been proposed by the large number of distinguished foreign officials and academics who have come to the University for short-term visits or study tours or for longer periods as visiting professors and researchers. Several initiatives have been undertaken to create new opportunities for useful international activities and to improve the financial terms for international projects. This report will describe some of these activities and recent initiatives.

Recent international activities

It is impossible in a short report to describe all of the international activities being carried out by the University of Toronto. This report, instead, will give several examples of the types of activities being conducted in the international sphere.

Several of the University's current CIDA-funded projects are aimed at strengthening educational institutions in third world countries. For example, in Sri Lanka, the Faculty of Social Work is engaged in a project to develop the curriculum and establish field training courses in that country's only School of Social Work which is attached to the Ministry of Social Services. In China, the University's health science faculties and the English-as-a-Second-Language Program of the School of Continuing Studies are participating in a linkage with Sichuan Medical College. Toronto General Hospital is assisting Beijing Hospital. The Faculty of Management Studies and the Faculty of Applied Science & Engineering are linked with the Huazhong University of Science & Technology in Wuhan in a project aimed at strengthening that university's new Department of Economic Management Engineering. In Peru, the Faculty of Forestry is helping the National Agrarian University in La Molina to establish a master's program. These projects help develop a capacity in the third world countries to train highly skilled personnel in sectors important to development. They also benefit the University of Toronto by encouraging new initiatives such as the establishment of an engineering

and management centre and the adoption of a broader and more comparative perspective in teaching and research.

Besides these CIDA-funded linkages, the University has ties with universities in Japan, Saudi Arabia, France and Italy. Two new exchanges have been initiated during the past year. An agreement between the Faculty of Dentistry and Nihon University in Japan provides for an exchange of faculty and students and joint research with Nihon's two schools of dentistry. After careful review by the Presidential Advisory Committee on International Exchange, an agreement in the field of nuclear engineering was concluded between the Faculty of Applied Science & Engineering and the Korea Advanced Institute of Science & Technology. This agreement provides for faculty and student exchanges and joint research on the peaceful uses of nuclear energy in areas such as reactor systems design and operation and reactor safety and control.

Various faculties and departments in the University now are considering proposals for the establishment of additional linkages with foreign educational institutions. For example, the Faculty of Medicine is exploring the possibility of an exchange in the clinical sciences with St. Joseph's Hospital in Bogotá, Colombia. The Department of Psychiatry is considering a proposal to conduct joint research in psychopharmacology with the Institute of Psychiatry in Shanghai. Several departments in medicine, engineering and arts and science have expressed an interest in conducting joint research projects with the University of Science & Technology of China in fields such as applied radio-isotope technology, rural energy technology and public/environmental health. The Faculty of Forestry soon will be submitting a proposal to CIDA for funding to help establish a PhD program at the University of Vicosa in Brazil. This proposal is the outgrowth of a successful CIDA-sponsored bilateral program under which seven Vicosa staff received their PhDs in Canada, three of them in our Faculty of Forestry. Various departments in the Faculty of Medicine and the Department of Botany are considering a proposal to cooperate in biotechnology with the Université des Sciences et de la Technologie Houari Boumediene in Algeria. The Beijing Institute of Civil Engineering & Architecture has proposed a linkage with the architecture and engineering faculties.

Another type of project, which promises to become more common in the future, involves the provision of the infrastructure needed to support these kinds of human resource development linkages. The International Student Centre has a contract with CIDA to provide professional, administrative and financial services for CIDA trainees at colleges, universities, businesses, governmental and industrial organizations in the province of Ontario outside the Kingston-

Ottawa area. The Joint Centre on Modern East Asia (University of Toronto-York University) has been given funding by CIDA to set up one of five regional preparation centres being established across Canada to support the large number of Chinese who will be coming to Canada under CIDA projects. These centres will provide an orientation and an English-as-a-second-language program for Chinese trainees and an orientation for Canadians going to China to work on CIDA projects.

Research dealing with a number of important development issues is being conducted under the Development Studies Program which has been headed by political science professors Richard Sandbrook and Cranford Pratt. Professors from economics, commerce, political science, history, sociology and geography are conducting interdisciplinary research and holding workshops and seminars on topics relating to the broad areas of north-south relations, comparative development strategies and agrarian structures. This program recently has received funding from the Donner Canadian Foundation for a three-year project involving scholars from Canada, Holland, Norway, Denmark and Sweden. This project, headed by Professor Cranford Pratt, will evaluate the role played by these middle powers in promoting greater equity in the international economic system. Project Ecoville, an international program led by Professors Joe Whitney and Rodney White of the Institute for Environmental Studies, is funded by the International Federation of Institutes for Advanced Study. Under this project, research is being conducted on the environmental consequences of rapid and large scale urbanization in third world countries.

Under these broad research programs, a number of projects are being conducted to assist governments and other institutions in the third world to deal with specific development problems. For example, Professor G.K. Helleiner of the Department of Economics has received IDRC funding for a collaborative project involving economists from the University of Toronto and the University of Dar es Salaam who will develop a macro-economic policy model for Tanzania. This model and related sectoral studies are intended to contribute to a more productive discussion of Tanzania's economic options. Professors J.W. Smith and Michael E. Charles of the Department of Chemical Engineering & Applied Chemistry recently completed a CIDA-funded project in which they proposed means for increasing fuel efficiency and productivity in local industry in the Caribbean through the creation of a Caribbean analogue to the Industrial Research Assistance Program. Professor W.C. Graham of the Faculty of Law is supervising a research team of eight third-year law students who are preparing background studies to assist the newly independent government of St. Kitts-Nevis. These studies deal with various aspects of international economic law

such as international trade and tariff structures, international tax treaties and continental shelf exploitation. Members of the research team, who are participating in the Faculty of Law's directed research program, will write an introductory text on the problems of implementing foreign economic law. Professors Richard Stren and Rodney White of the Institute for Environmental Studies have asked IDRC to fund a comparative analysis of urban growth and the management of urban reform in seven African countries. Research teams of academics and policy-makers from these seven anglophone and francophone African countries will participate in the project whose goal is to establish a more useful framework for the analysis of future policy options by identifying the conditions for successful and unsuccessful reform in Africa today. IDRC already has provided funding for the individual African research teams.

Still other projects are aimed at developing technology appropriate for third world countries and at training policymakers and citizens in the use of effective methods and techniques for coping with development problems. One excellent example is project Tapis Vert which is being conducted in the Chikal region of Niger with the assistance of the Institute for the Study & Application of Integrated Development run by Father Gerry McGuigan of St. Michael's College. Under this project, which is being conducted in cooperation with the National Institute of Agricultural Research of Niger, field activities are being carried out at the village level to select and demonstrate affordable methods of soil and water conservation, farming techniques and methods of building and cooking which will increase agricultural productivity, soil fertility and conservation of organic material. Professor Rorke Bryan of the University's Scarborough campus is requesting CIDA and IDRC funding to conduct a training program in soil conservation and hydrology for tropical regions. The proposal calls for the establishment of two instrumented drainage basins in Kenya and Nigeria. The work will develop data collection techniques and instruments appropriate for the physical, social and financial conditions in developing countries. The drainage basins will serve as sites for extensive field training of graduate, undergraduate and high school students and for short residential field training courses targeted at governmental officials already actively involved in land-use management. Under Project Ecoville, workshops have been conducted in third world countries on the development of simulation models of urban areas which can be used by researchers and planners to evaluate different strategies for dealing with pollution problems.

In other cases, individual staff members at the University have received funding for small-scale projects involving joint research with foreign academics or participation in

conferences or technical assistance programs. To give a few examples, Dr. Barry Shandling, senior staff surgeon at the Hospital for Sick Children, received CIDA funding for travel and other costs associated with participation in a conference on Health for All held in July 1983 in Havana, Cuba. Dr. Bernhard Cinader of the Institute of Immunology was given IDRC funding to support research on immunoregulation by Dr. Lin Xueyan of the Epidemic Institute in Fujian, China. Dr. J.R. Cunningham of Princess Margaret Hospital has received CIDA funding to bring Dr. T'ang Hui of the First Medical College of Beijing to Toronto this coming July to attend the Eighth International Conference on the Use of Computers in Radiotherapy. Professor Aidan McQuillan of the Department of Geography has requested CIDA funding to support his participation in a technical assistance program on urban rehabilitation and historic preservation to be given in China this spring. Professor Christian Bay of the Department of Political Science has asked the Canadian Commission for UNESCO to fund participation by third world delegates in the 1984 annual meeting of the International Society of Political Psychology to be held this June in Toronto. A number of the issues that will be discussed at this conference are of particular relevance for third world countries.

In addition to these collaborative programs and research projects, a large number of the University of Toronto's academic programs provide useful training for foreign students and help prepare Canadians interested in becoming involved in international activities. Next year, a new undergraduate program will be started which integrates political, economic and social development studies with courses in ecological and resource management and with study of the languages and cultures of certain geographic areas. This Scarborough Cooperative Program in International Development Studies is a five-year program which includes an eight-month work placement in the fourth year, usually with a Canadian-sponsored development project or agency abroad. Professor Arthur Sheps, director of cooperative programs on the Scarborough campus, has applied to CIDA for funding for the work placements.

Functions of the Office of International Cooperation

The Office of International Cooperation is the initial point of contact for many of the foreign institutions making proposals to the University as well as a major point of contact for international initiatives coming from the University community. The office has been involved in many of the projects described above, assisting in the planning and vetting process, writing or reviewing proposals and budgets, participating in discussions with funding agencies and foreign institutions, dealing with problems that arise in the implementation of projects and, when requested, participating directly

in their execution. Another function of the office is to serve as the focus of an information network, bringing opportunities for international activities to the attention of the University community and making funding agencies aware of the University's capabilities.

Problems and initiatives

In the course of performing these functions, the office has become aware of certain problems that require attention. Some of these problems are caused by the growing pressure on the University in the international area. Each year, the University attracts a large and growing number of foreign visitors who come here to propose linkages involving faculty and/or student exchanges and/or collaborative research. While this increasing activity has brought considerable benefits to the University community, it is not clear that the University always is using its limited resources to participate in those activities which are potentially more useful. At times, there has been a tendency for the University community to respond to initiatives made by others, rather than establishing its own priorities based on a full knowledge of all the available opportunities. There is a need for the University to expand ties with funding agencies in order to learn about opportunities for fruitful interaction which it may now be ignoring. In common with other Canadian universities, the University has been so busy dealing with the Institutional Cooperation & Development Services (ICDS) Division of CIDA that it has found little time to establish institutional contacts with other divisions of CIDA and with other funding agencies.

Still another problem is the inadequacy of the financial terms offered by CIDA and some other funding agencies. In some cases, the University has not received money to cover the indirect costs and some of the direct costs of participating in international projects.

The Office of International Cooperation has become involved in several initiatives to deal with these problems.

Financial terms

Over the past few years, the Office of International Cooperation has worked together with the international offices of other Canadian universities to persuade CIDA's ICDS Division to offer better financial terms for projects. Up until now, this division of CIDA, which funds the vast majority of the projects executed by Canadian universities, has not paid for overhead expenses and has required universities to make significant in-kind contributions to projects. Just recently, an agreement in principle has been reached between CIDA officials and Canadian university representatives to amend this funding formula. This change will allow the ICDS Division to finance projects on the same terms as the other divisions of CIDA which pay for total direct costs plus overhead calculated as 30 percent of payroll costs. This new formula now has been approved by the AUCC, and formal CIDA approval is expected soon.

This new funding formula represents a significant improvement over the terms previously offered by CIDA's ICDS Division. However, further study needs to be done to determine whether or not the new terms in fact will prove to be adequate and fair. The proposed overhead rate to be paid by CIDA is far less than the overhead costs of research and teaching activities at Canadian universities.^a However, since in most international projects some of the activities are conducted abroad, their average overhead costs may be less than the average overhead costs of research and teaching activities conducted entirely at the University. No study has been carried out to determine the actual overhead costs of international projects^b nor to analyse whether it is more equitable to link overhead rates to payroll costs or to total direct costs. This office will press for further study of these matters with a view to persuading CIDA to consider additional changes in its funding formula if it should be determined that the current terms are inadequate or inequitable.

Canadian universities also have tried, unsuccessfully, to persuade IDRC officials to pay overhead. The University of Toronto along with other Canadian universities will continue to press for a change in this policy.

Ties with funding agencies

There are many underutilized opportunities to obtain external funding for individual and institutional involvement in international activities. Individual staff members can serve as consultants for CIDA, the World Bank and other funding agencies, helping them to identify priority areas for funding, to prepare, vet and evaluate specific projects and to provide an orientation for participants. Universities can implement projects and provide training for foreign students, researchers and officials in regular academic programs or in specially designed short courses and seminars. Graduate students can participate in internship programs run by various funding agencies or in projects by serving as volunteers or as associate experts.

In order to take advantage of these opportunities, it is necessary to increase and improve the two-way flow of information between the University and funding agencies. It is particularly important to establish personal contacts with third world governments, with funding agency staff at headquarters and in the field (UN resident coordinators, UNDP field missions, IDRC field offices, etc.), with key Canadian officials such as Canadian executive directors of international financial institutions and appropriate staff members in Canadian missions abroad and with well-connected foreign alumni and students. The Office of International Cooperation has begun to do this by participating in several meetings with funding agency representatives and has begun to collect written material about funding opportunities, for example, by subscribing to the Development Forum Business Edition which contains monthly operational summaries of the projects under consideration by the World Bank, the Inter-American Development Bank and other international financial institutions.

Surveying capabilities and setting priorities

The office is planning to do a survey of University capabilities in the international area by sending out questionnaires to individual faculty members, by interviewing appropriate University officials and by collecting departmental brochures and other written material about the University's research activities. The purpose of this exercise will be to determine in what areas there is not only the expertise and field experience but also the interest and staff and other resources needed to support increased involvement in international activities. It also would be useful to survey the student body to determine what kinds of international opportunities would interest students but the office does not have the resources to do this at the current time.

The office also plans to make members of the University community more aware of the various kinds of opportunities that exist in the international area to enable them to choose those that best support the University's research and teaching programs. The prospects for success in obtaining funding, particularly from multilateral agencies, will be enhanced by bringing together members of the University community interested in focusing their efforts in a particular sector and/or geographical area. In some cases, it may be advantageous to establish consortia with other Canadian universities sharing similar interests.

Given the limited staff resources of the Office of International Cooperation, a long-term effort will be required to perform the tasks identified in the preceding sections. It is hoped that members of the University community will support this endeavour by providing useful contacts, information and advice.

^a A detailed study of fourteen representative Canadian universities in 1982 by the Canadian Association of University Business Officers showed that the average overhead cost at these universities was 59 percent of total direct costs or 70 percent of payroll costs.

^b In this context, it should be noted that although the average cost of space, facilities, etc. used for international projects may be lower than the average costs associated with other research and teaching activities, the average cost in terms of administrative time of the comptroller's office staff may be much higher because CIDA's financial reporting requirements are far more onerous than those of other funding agencies.

Events

Lectures

Rhetoric and Theology in Erasmus' Biblical Scholarship.

Tuesday, May 22
From Soul to Soul: Persuasion in Erasmus' *Paraphrases* on the New Testament, Prof. John J. Bateman, University of Illinois at Urbana-Champaign;
The Definition of Biblical Language in the New Testament Scholarship of Erasmus, Prof. Robert D. Sider, Dickinson College;
Last two in series The New Testament Scholarship of Erasmus. Alumni Hall, Victoria College. 10 a.m. to 12 noon.
(Collected Works of Erasmus, U of T Press, Reformation & Renaissance Studies and SSHRC)

Church Restorers in Ireland as Victorian Architects.

Wednesday, May 23
Prof. Douglas Richardson, Department of Fine Art, 140 University College. 8 p.m.
(English and William Morris Society)

Working with the Victims of Repression: The Chilean Experience.

Friday, May 25
Dr. Fanny Pollarolo, Santiago, Chile. Lecture theatre (room B12), Princess Margaret Hospital. 11 a.m. (Psychiatry, Wellesley Hospital)

New Strategies in the Treatment of Manic Depressive Disorder.

Wednesday, May 30
Prof. Guy Chouinard, McGill University. Auditorium, Clarke Institute of Psychiatry. 12 noon. (Psychiatry and Hoffmann-La Roche Ltd.)

The New Health Act: Its Implications for Us All.

Friday, June 1
Hon. Monique Bégin, Minister of National Health and Welfare; in honour of women in medicine. 103 Fitz-Gerald Building. 2 p.m. (Women's Centenary Committee and Faculty of Medicine)

Seminars

Site Specific Alteration of Genes.

Tuesday, May 22
Dr. V.L. Chan, Department of Microbiology. 235 Fitz-Gerald Building. 4 p.m. (Microbiology)

Experimental and Human Pathology.

Hormone Secretion: A Long Way from the Ribosome to the Circulation.

Wednesday, May 23
Dr. Kalman Kovacs, Department of Pathology, St. Michael's Hospital.

The Dense Peripheral Band: Studies on Its Role in Endothelial Cell Structure and Function.

Wednesday, May 30
Michael K.K. Wong, Department of Pathology.

The Metabolism of Benzene and Its Inhibition of Macromolecular Synthesis in Mitochondria.

Wednesday, June 6
Dr. Tom Rushmore, Department of Pathology. 4171 Medical Sciences Building. 4 p.m.

The European Copper and Brass Industry c. 1300 - 1900 A.D.

Thursday, May 24
Prof. A.M. Pollard, University of Oxford. 158 Wallberg Building. 3.30 p.m. (Metallurgy & Materials Science and Collegium Archaeometricum)

Reconstitution of the Lactose Carrier from a Lac Y Mutant of *Escherichia Coli*.

Thursday, June 7
Dr. Donna L.T. Seto-Young, National Research Council, Ottawa. 423 FitzGerald Building. 4 p.m. (Microbiology)

Quantitation of Metabolite Fluxes in Intact Cells.

Prof. Joseph J. Blum, Duke University Medical Center.

I. General Considerations.

Thursday, June 7
4279 Medical Sciences Building. 4 p.m.

II. Flux Values along Pathways of Intermediary Metabolism for Hepatocytes Incubated in a Mixture of Glucose, Ribose, Fructose, Alanine and Acetate in the Presence and Absence of Glucagon.

Friday, June 8
417 Best Institute. 2 p.m. (BBDMR)

Meetings & Conferences

Religion and Culture in Canada.

Wednesday, May 23 to Saturday, May 26
Sessions from 9 a.m. each day at Ontario Institute for Studies in Education except Friday, May 25, symposium in honour of Prof. John Webster Grant, Emmanuel College, Religion and Nationalism: Visions in Conflict, at Victoria College. Registration fee \$40 in advance, \$50 at door, students \$25; one day \$10. *Information: OISE Conference Centre, 923-6641, ext. 391/392.* (Centre for Religious Studies, Committee to Honour John Webster Grant, Canadian Church Historical Society and Association for Canadian Studies)

Cepheids: Observation and Theory.

Monday, May 28 to Friday, June 1

Department of Astronomy and David Dunlap Observatory 18th annual June Institute, series of lectures on topics related to recent developments in astronomy and astrophysics; International Astronomical Union Colloquium 82. Those whose interests lie in this field are invited to attend. *Information: 978-3150.*

The Information Economy: It Implications for Canada's Industrial Strategy.

Wednesday, May 30 to Friday, June 1
Conference will include plenary sessions and workshops on Technology and Markets, Employment and Industrial Strategy and National Sovereignty. Erindale College. Registration May 30, Meeting Place, South Building, from 4 p.m. Registration fee \$350; university faculty and students \$100. *Information: 978-5460.* (U of T/Waterloo Cooperative on Information Technology and Royal Society of Canada)

Symposium on Selected Topics in Physics.

Friday, June 8
In honour of Prof. Jan Van Kranendonk, Department of Physics, on his 60th birthday. Welcome by Prof. R.E. Azuma, Department of Physics. 9.10 a.m. Intermolecular Forces and the Properties of Interacting Molecules, Prof. A.D. Buckingham, University of Cambridge. 9.30 a.m. Hydrodynamic Interactions, Prof. Peter Mazur, Institute-Lorentz, The Netherlands. 11 a.m. Orientational Ordering in Solid H₂, Prof. Horst Meyer, Duke University. 2 p.m. Current Problems in General Relativity, Prof. Werner Israel, University of Alberta. 3.30 p.m. George Ignatieff Theatre, Trinity College. *Information: 978-2945.* (Physics and Xerox Research Centre of Canada)

Miscellany

Book Sale.

Thursday, June 7 and Friday, June 8
Woodsworth College sale will be opened by Barbara McLeod at 4 p.m., June 7. Drill Hall, 117 St. George St. Thursday 4 to 8 p.m.; Friday 9 a.m. to 5 p.m. *Information: 978-4197.*

Woodsworth Open House.

Thursday, June 7
In celebration of college's 10th anniversary; meet the staff, see films and displays. Woodsworth College, 119 St. George St. 4 to 8 p.m. *Information: 978-5340.*

Convocation.

Friday, June 8
Faculties of Pharmacy, Nursing and Dentistry. Dr. C.H. Hollenberg, vice-provost, health sciences, will give Convocation address. Convocation Hall. 2.30 p.m.

Monday, June 11
School of Graduate Studies. Honorary graduand A.J.E. Child will address Convocation. Convocation Hall. 2.30 p.m.

Exhibitions

Justina M. Barnicke Gallery, Hart House.

To May 24
West gallery: Robbin Yager, pastel drawings.
East Gallery: Rachel Rotenberg, sculpture.

May 31 to June 28
West Gallery: Margaret Rossiter, paintings and drawings "On the Subject of Seeing".
East Gallery: photographs by Jane Story, "A Palestinian Portfolio", and James A. Chambers, "Pakistan".
Gallery hours: Tuesday - Saturday, 11 a.m. to 6 p.m.

Scarborough College.

To May 31
Fifth annual juried student show.
Gallery hours: Monday-Thursday, 9 a.m. to 7 p.m.; Friday, 9 a.m. to 5 p.m.; Sunday, 2 to 5 p.m.

Robarts Library.

To June 25
Research for Living - The University of Toronto. In celebration of provincial bicentennial, exhibition of current research at the University sponsored by Community Relations Office with co-operation of U of T Archives and academic departments. *Please note closing date.*

Erindale College.

May 25 to June 8
Fireworks 1984, clay and glass objects.

June 11 to 30
Visual Arts Mississauga, juried craft exhibition.
Gallery hours: Monday-Wednesday and Friday-Sunday, 1 to 7 p.m.; Thursday, 1 to 9 p.m.

Architecture & Landscape Architecture.

June 1 to 22
Final year projects of students in faculty.
Hours: Monday-Friday, 9 a.m. to 5 p.m.

Governing Council & Committees

Curriculum & Standards Subcommittee.

Wednesday, May 23
Council Chamber, Simcoe Hall. 4 p.m.

Planning & Resources Committee.

Monday, May 28
Council Chamber, Simcoe Hall. 4 p.m.

Academic Affairs Committee.

Thursday, May 31
Council Chamber, Simcoe Hall. 4 p.m.

Planning & Resources Committee.

Monday, June 11
Council Chamber, Simcoe Hall. 4 p.m.



"Water Spirit" by Rachael Rotenberg, at the Justina M. Barnicke Gallery, Hart House. See Exhibitions for details.

Alumni Calendar

Spring Reunion.

Friday, June 1 to Sunday, June 3
Honoured Years 1914, '24, '34, '44, '59.
Information: 978-2366.

Alumni College at Spring Reunion

Friday, June 1
Morning: Grant Davis, U of T Computing Services, "Microcomputers for Beginners" and Professor Robin Harris, University historian, "The U of T under Presidents Falconer, Cody, Smith and Bissell."
Afternoon: David Dvorchik, Moss Lawson Company Ltd., "Current Investment Considerations"; Anne Rochon Ford, researcher with Women in Toronto, "Women at U of T 1884-1984"; and Debbie Heitler, World Travel Service, "How to Plan Vacation Travel". Microcomputer lab will be open for use of the microcomputers in the afternoon.
134 McLennan Physical Laboratories. 9 a.m. to 5 p.m. Fee \$10 per person includes luncheon. Please

register by Friday, May 25. *Information and registration forms: Ed Thompson, Department of Alumni Affairs, (416) 978-8991.*

Woodsworth College Alumni Association.

Friday, June 1
Rev. Stewart B. East, Applewood Foundation, will give illustrated talk, "The Birthplace of James Shaver Woodsworth"; special spring reunion event, all alumni welcome. Applewood House, 450 The West Mall, Etobicoke. 7.30 p.m. *Information: 978-5340.*

Woodsworth College Alumni Association Annual Meeting.

Monday, June 4
Woodsworth College lounge. Dinner 6 p.m.; meeting 7 p.m. *Information: 978-5340.*

U of T Alumni Association Executive.

Tuesday, June 5
Conference room, Alumni House. 5.30 p.m.

Physical & Occupational Therapy Alumni Annual Meeting.

Wednesday, June 6
Alumni Lounge, Medical Sciences Building. 6 p.m.

Scarborough College Alumni Association Annual Meeting.

Thursday, June 7
Principal's residence, Scarborough College. Time to be confirmed. *Information: 978-2366.*

Social Work Alumni Association Bi-Annual Meeting.

Monday, June 11
East Common Room, Hart House. 7.30 p.m. *Information: 978-2366.*

Pharmacy Alumni Association Executive.

Wednesday, June 20
Faculty of Pharmacy. 8 p.m.

Ottawa Alumni Branch.

Thursday, June 21
Dean Robin Armstrong, Faculty of Arts & Science, will speak at June meeting of Ottawa branch. *Information: 978-2365.*

WOODCUTTER

1519 BAYVIEW AVE.
TORONTO, ONT.
481-3835

BARRY BLACKETT

RESIDENTIAL & OFFICE FURNITURE
PARSONS TABLES
STEREO & WALL UNITS
CONTEMPORARY &
CANADIANA
STYLES

PINE - OAK - CHERRY - MAHOGANY

Provincial testing and the university

by Mark Holmes

The announcement in the Throne Speech that provincial testing is to be reintroduced in Ontario was greeted with predictable cheers from the public (particularly those people with knowledge of the problems of colleges and universities) and equally predictable boos from officials of the teachers' federations. Presumably the latter have more clout than the former, as subsequent pronouncements and "clarifications" from Bette Stephenson and ministry officials have led us to believe that it will be years (at least) before testing will actually be administered to all graduating students. By the standards of Ontario politics, there is a perverse kind of logic to not giving the people what they want — and should have; after all, some teachers may vote against the government on that single issue, but few members of the public will vote for the government simply on the basis of testing.

Universities and testing

Universities need a fair and universal system to select their incoming students. The reasons are fairly straightforward. First, at Canadian universities, not every applicant is accepted. Even the poorest universities have minimal standards and the better universities pride themselves on having high standards. Selection by a university is a privilege that carries opportunities for further education and training and the probability of achieving access to rewarding, well paid, high status employment. Such opportunities should not be provided irrationally or randomly. Second, competition for some programs (such as engineering, nursing and pharmacy) is particularly strong. Unfair rejection of students beginning a general arts program may not be calamitous (they will generally get in somewhere sometime), but a fair competition for the professional programs is essential. Third, the allocation of scholarships should be based on genuine academic merit rather than happenstance.

It is impossible to design a system that is perfectly fair to everybody, but we should surely work to eliminate as much systematic unfairness as poss-



ible. However, in being fair to students, we must also take into account the interests of society and of the university. Thus, to a person who wants to allocate university places by quotas based on sex and ethnic and social origin, I would recall the academic responsibilities (purposes) of the university. Universities are, by definition, elitist — they accommodate the bright, the curious, the imaginative, the industrious rather than the slow, the lazy and the unimaginative. So, our selection system must meet two criteria — it must be fair to applicants and it must lead to the selection of the best possible students for the various programs.

Meeting the criteria of fairness and excellence

It seems to me fairly obvious that the current system in Ontario cannot possibly be seen as meeting the first criterion. Standards vary considerably from school to school and, less frequently recognized, from teacher to teacher within a given school. Even where there is a common examination within a school, there are well known if somewhat unprofessional ways of getting around that hurdle (e.g., the teacher who disapproves of question X coaches students on that particular item). Some faculties (e.g., the engineering faculty at the University of Toronto) try to compensate for differences in schools' standards by converting applicants' averages to standard scores based on the performance of previous students from the same school in the program. This cure is as bad as if not worse than the disease: the sample of students from some schools is very small and therefore the aberrant poor performance in university of a handful of students may unjustly penalize subsequent students; it assumes that school standards are unvarying; and it does nothing for the variation of standards within schools (and anyone with children in high school knows about that problem). What the present system does is reward students who have attended schools and have been taught by teachers with low standards and punish students who have attended schools (such as UTS, the Toronto French School, Lorne Park and York Mills Collegiate) known for their standards. The incentive is for schools to be dragged down to some mediocre middle — any push for excellence, by an individual teacher or by an individual school, is actively discouraged by the system for the obvious reason that it penalizes the school's students. In

fact, schools brag about their number of Ontario Scholars — where it is well known that the proportion of Ontario Scholars has more than doubled since the abolition of school leaving examinations while the average level of achievement of graduates (according to the scanty research available — the ministry does not ask questions it would rather not have answered) has declined rather than improved.

As for the second criterion, proponents of the *status quo* are quick to point out that school marks in Ontario predict success in university (i.e., marks at the end of first year) as well as or better than Ontario's old school leaving exams and other countries' tests and examinations. That argument is valid enough and, to the extent that we accept university grades as a reasonable measure of quality, we must accept that changing the method of selection is unlikely to have very much short-term effect on the overall quality of a university student body, if other things remain the same. There is an obvious reason why teachers' marks correlate quite well with university marks — grade 13 teachers and university teachers tend to mark in roughly the same way while external tests work in a somewhat different way; teachers are more likely to reward reliability, conformity and conscientiousness, external examinations more likely to reward intelligence and analytical understanding.

The argument for provincial testing

The argument for external testing rests more, in the short term, on the first criterion (of fairness) than on the second (of undergraduate student quality). In the long term, however, overall standards are more likely to be raised by having students work competitively for externally set criteria of excellence than by having them meet only local standards, which are held to a mediocre common denominator. Let us be frank — are students likely to be better in the University of Tokyo (for entry to which there is fierce competition, very likely too fierce) and the University of Chicago or in the University of Toronto (for which there is much less competition)? Are standards raised by rewarding mediocrity, or excellence? Recent research in the US is showing clearly that one of the mechanisms for raising standards of achievement is the regular monitoring of individual achievement and the development of a positive academic climate within the school. Will that be a surprise to the Toronto French School or to York Mills?

Once the principle is accepted that applicants, at least from our own province, should all undergo the same entrance procedures, the technical problem becomes less difficult. I have heard no voices calling for total reliance on a single set of examinations (that is a straw man set up by the opponents of testing). Most of us would like to use both teachers' marks and test results, either as separate criteria given equivalent weight in the process (as is done by many American universities) or by statistically combining the two results (as is done in Quebec). What the opponents fail to point out is that combining teachers' marks and good test results slightly improves the prediction of university results. There is no reason at all why Ontario should ignore all that has been learned about testing in the last 20 years and revert to the frequently abused examinations of 1967. Ontario could choose between the American-type tests, which are well removed from the specific curricula used in the classroom, and the much improved and sophisticated examinations now used in Britain and Australia. Personally, I would choose a compromise — emphasizing objective questions which test analytical skills and comprehension, and essay questions, which test writing ability and the ability to synthesize and evaluate.

Why should we bother? Is Ontario education really so bad? Does unfairness really matter? I think we should be concerned about the cynicism in our young people the current system invokes. They are bright — they know the game. We should be concerned about educational standards not because ours are particularly low but because they are not particularly high. Can we afford to continue to lose ground to Japan, South Korea and the best of western Europe? Is mediocrity all we want in complacent Ontario?

Mark Holmes, professor of educational administration, Ontario Institute for Studies in Education, directed a major project evaluating educational achievement in Ontario at the eighth-grade level. He is the principal author of the Ministry of Education's Intermediate Reading Item Pool and co-author of the Council of Ontario Universities' Ontario Test of English Achievement.

Freedom of Science and Scholarship in the Contemporary World

Chairman, H. Gordon Skilling
University of Toronto

Yuri Luryi, University of Western Ontario
The Dilemma of the Soviet Scientist

Peter Landstreet, York University
**Repression of Social Scientists:
A Chilean Case Study**

Daniel Soberman, Queen's University
**Academic Freedom and the
Control of Research in Canada**

Gordon Lowther, York University
**Darwinism, Creationism and
Freedom of Research**

Roger Gaudry, Université de Montréal
**Freedom of Science —
Some Canadian Problems**

Open to the Public

A panel discussion under the auspices of the
Committee on Freedom of Science and
Scholarship of the Royal Society of Canada

At the University of Guelph
Physical Sciences Bldg. 105

Wednesday, May 30
at 1.30 p.m.

The CORONA PC — a computer with class!

The Corona PC is an IBM-compatible computer that offers more features and costs less.

Special Educational price of \$3,150 includes 128K, 2 disk drives, monitor, WP software, etc. A complete system!

We include delivery, set-up, training and on-going support.

Call Phil Sokolowski at 482-7025 for more information.

PS Pro Software

2281 Yonge St., #202
Eglinton and Yonge
482-7025

Classified

A classified ad costs \$5 for up to 35 words and \$.25 for each additional word. Your name counts as one word as does your phone number, but the components of your address will each be counted as a word. No charge for postal code.

A cheque or money order payable to *University of Toronto* must accompany your ad.

Ads must be submitted in writing, 10 days before *Bulletin* publication date, to Marion de Courcy-Ireland, Department of Communications, 45 Willcocks St. Ads will not be accepted over the phone.

Accommodation Rentals Available — Metro

Furnished Victorian house, near Bloor/ Spadina (close to University). Three bedrooms, den, two bathrooms, fireplace, dishwasher, washer, dryer. \$1,000 month plus utilities, 10 to 12 months from September 1984. Evenings 922-8115, days J. Field, 369-2285.

Airy, modern high rise apartment available July-August, Toronto Yonge subway at Eglinton. 2 bedrooms, 2 baths, indoor parking, pool, balcony, security guard. Fully furnished (Canadian antiques). \$700 per month. Educators or teachers preferred. 416-487-2201; 416-349-2211.

1 year sublet 1-BR, furnished or unfurnished, High Park/ Bloor next to park and subway. Summer/ fall 1984-1985. 766-2652.

Sublet: Excellently located, spacious, furnished, lovely one bedroom apartment for July, but possibly to Aug. 15. Steps to Art Gallery of Ontario, near U. of Toronto and Grange Park. \$495 monthly, includes utilities and parking. 593-9276, 923-5256, 978-6926 (Roman).

Sublet: Furnished three bedroom, two-storey apartment in Cabbagetown (between Sherbourne-Parliament and Wellesley-Carleton) for July but possibly to August 15. \$523 monthly plus utilities. 15 minute walk to U. of Toronto, close to parks. 593-9276, 923-5256, 978-6926 (Roman).

For rent. Aug. '84 - July '86. Furnished house, detached, 3 bedrooms, office, 1½ baths, finished basement; Toronto west end; near parks, subway, shops, schools; easy access to downtown and Q.E.W. \$1000 +/mon. negotiable. 769-4692 evenings.

House for rent. July '84 - July '85. Yonge/Eglinton area. A 3 minute walk from subway, furnished, 3 bedrooms and study, private drive and garage, perfect for family of 3 or 4. \$900/month + utilities. Call 484-0727.

Available July & August: Spacious furnished apt. in Toronto. Large bedroom plus study; balcony with view. Steps to High Park and Subway, 15 min. to U of T. Single or couple. \$500 per mo. (416) 769-2157.

Davenport & Christie. Upper duplex, three bedrooms, sunroom, broadloom, near TTC, available June 1, \$670 includes utilities. 923-9387 nights & weekends.

House for the academic year. Bathurst-Wilson, detached house, large yard. 2 bedrooms, 1½ baths, living, dining, central air & heat, TV; dishwasher. Quiet neighbourhood. Sept. to May. \$700 a month + utilities, non-smoker. 636-6230.

For rent: lovely bright Beaches 3-bedroom home. Furnished, parking, fenced backyard, fireplace, finished basement. Steps to Queen St. & boardwalk. Mid-Aug. '84-Aug. '85. \$900/month plus utilities. (416) 698-1893.

Townhouse. Central. Two bedrooms plus den, fully furnished with garden, parking. On Bloor subway. Available July/August. \$650 per month. Phone 463-5084.

September '84 - August '85. Bright, renovated 5-bedroom house near High Park. Furnished. Many appliances. Sunroom. Good yard and deck. Near French immersion and English school. Excellent transit/subway. Quiet street. \$1100/month + utilities. Call Gordon, leave message 534-7329.

Two bdrm house. July/August. Bathurst & St. Clair. Clean, comfortable, completely furnished, including antiques, crafts & piano. Pleasant garden. Italian neighbourhood. Near streetcar, subway & shopping. \$750 + utilities. Car rental negotiable. Call M. Webber, 651-0548.

"Sunny" basement apartment. Separate entrance, private bathroom, new kitchen, free parking. One block south of Bloor at Bathurst. Ideal for the "discerning" individual. \$400/month. Call evenings 531-6160. After 7 p.m.

Summer rental (June 22 - September 1) Fully furnished three bedroom house with sunroom. Walk to Yonge-Sheppard subway. All appliances including dishwasher. Piano, cable-TV. Large, treed garden with jungle-gym. Garage. \$700 per month plus utilities. 223-4569.

Five bedroom house for family, easy walking distance to U of T campus, 10-12 month lease beginning September, \$1500/month, references required, call 744-3330 (9-5).

Summer sublet. (July 1 - Aug. 31) 2 bedroom furnished flat in 2 storey building close to Sherbourne/Bloor. Convenient for campus and downtown. \$650 month. 961-3617.

One bedroom apartment, 500 square feet, near Yonge & St. Clair, tastefully furnished, large swimming pool, tennis court & garden, for July & August. \$550 a month. Call Peg Forbes 925-0178, preferably evenings or write 2303-7 Jackes Av. Toronto M4T 1E3.

On U of T Doorstep, 2 bedroom apt. on quiet elegant sidestreet. Large kitchen, private garden. Washer/Dryer provided. \$560 per month. All utilities included. Parking available if desired. Evenings 968-9392.

Hillcrest Village (Central) — Bright, clean basement bachelor. Broadloom. Modernized private bath. Separate entrance. Share garden and laundry fac. On transit. Tennis. Park and shopping nearby. Summer or permanent. Suit one. \$300. 978-4868 (Jorgensen).

Sabbatical Rental. 12-13 months from July. Gracious 5-bedroom home, century-old residential area, just southwest of highways 400/401. Fifteen minute drive to York, half-hour to U of T. Walk to GO train, seven TTC routes. Two 4-piece baths, fenced yard, double garage. \$1200 plus utilities. Pelletier 667-3920 (office), 244-6530 (home).

Renovated 1½ bedroom coachhouse. Charming, bright, private. Parking. Patio/lawn. New appliances. Available July 1. \$600 plus hydro. Oakwood/St. Clair. 651-8196.

Luxury 3 bedroom apt. to sublet July 1/84. Ideal central location; Eglinton & Avenue Rd. \$899/month includes heating. 2 minutes to subway by bus. Home 487-9869 (after 6). Work 978-5017.

Huge ground and second-floor duplex in Annex. 2 bedroom, 2 baths, 5 appliances. Many beautiful features including three fireplaces, oak trim, hardwood floors throughout, sunporch and large garden. Available June 1st, \$1250 incl. Call 923-0857.

Sabbatical apartment. Large, fully-furnished one bedroom with sun room. In luxury building with pool, saunas, squash court, exercise room, etc. Suitable for an individual or a couple. Three blocks south of campus (at One Park Lane). Available July '84 to June '85. Approx. \$850/month. Call Ken Sevcik at 978-6219.

Don Mills/Finch luxury extra large fully furnished house, 4 bdrm, 2.5 baths, studyroom, familyroom with fireplace, 5 appliances plus chest freezer, finished basement, central air conditioning, double garage, many extras. Family only, no pets, 1 year Aug. 1st. \$1,800, call day 667-4985, night 491-4694.

House for rent: fully furnished, 4 bedrooms, 2½ baths, family room, playroom, office, fireplace, 6 appliances, good schools, Bayview and Steeles. Available Aug. 15, 1984 to June 30, 1985. Phone 221-5363.

Sunny, decrepit, huge 2 bedroom apartment. Sublet June - August flexible. Fully furnished. Bloor & Sherbourne. Convenient to U of T & hospitals. Suits newborn. Could include car. Approx. \$650/mo. inc. utilities. 964-0950 any time.

Cozy 3 bedroom, furnished, 1½ baths, very private treed garden on ravine, near Humber and other parks, short bus ride to Old Mill subway. July 84 - Summer 85 or 86. \$850 + utilities. Tony or Eva Liman, 255-7585 evgs, mornings.

Accommodation Rentals Required

Professor and wife wish to rent, or exchange, furnished home or apartment during sabbatical leave October 1984 - September 1985. G.R. Langley, 6025 Oakland Road, Halifax, Nova Scotia, B3H 1N9. 1-902-429-5045.

Visiting professor from Bath, U.K., with wife and baby, require furnished two bedroom accommodation near U of T from August 1 through Dec. 31 (flexible dates). Non-smokers. (416) 487-7283 or (416) 978-6488.

Professor seeking 2 - 3 bedroom unfurnished accommodation near University for July or August move. Contact S. Glickman, 534-7451. Please leave message on machine if no one home!

Summer Rental: Professional couple from U.S. wishes to rent spacious apartment/home from July 1 - August 5. One or two bedrooms. Parking. Near U of T. Call 595-3314 or collect (601) 268-0312.

Doctor and family seek 4 bedroom furnished house to rent for 1 to 2 years commencing July 1, 1984. Prefer nice area relatively close to downtown. Contact G. Burnett 598-6050 daily.

Accommodation Out-of-town

Cottage for rent: Bruce Peninsula, lakefront, three bedroom, fireplace, hot water, available July and August, \$195 per week. Call Iris Hamilton, Department of Athletics and Recreation, 978-4676, or evenings 233-6435.

Stop at Hare's Homestead Bed and Breakfast 14 kms. North of Parry Sound this summer. If you are travelling or just interested in some beautiful Georgian Bay scenery and relaxation. Music lovers might like to stay with us for the Parry Sound Festival of the Sound. July 22 - Aug. 14. We are an approved Ontario Farm Vacation Home. O.V.F.A. brochure on request. Write or phone Arn & Terry Hare. R.R. #1, Nobel, Ont. P0G 1G0. 705-342-9964.

Italy, Rome, 3 bdrm. furnished apt., garden, downtown, close to public transport. Short or long term. From Aug. 84 to June 85. 823-9040 ext. 638 days. 781-2397 evenings.

Uniquely Beautiful two bedroom log house, rare setting on rock overlooking pristine Coulouge River (Quebec) in Ottawa Valley. Wood/electric heat. Winterized. Total quiet and privacy. Sept. 1/84 - One year lease. Write J. Mills, R.R.1, Fort Coulouge, Que., J0X 1V0. (819) 683-3219.

Wilderness Experience in Northern Ontario. We have a few openings for this summer in our remote fishing resort. Log cabins, sauna, excellent fishing, no road access, unique setting. For information please call Michael Spazier (705) 884-2211.

Summer Rental in London, England. Furnished, two bedroom house to rent in cheerful London market street, June 1st to September 1st (or months thereof). Easy access to British Museum. £400 per month, all inclusive. Contact: Michael Ignatieff, 84 Chapel Market, Islington, London N. 1, Tel. 278-7901; or Le Puits, Les Martins, par Gordes, Vaucluse 84220, France, Tel. (90) 72 20 10.

Essentially furnished apartment in Rome available to teachers or researchers, from October next. Rent to be discussed. Please contact Mr. Del Re (416) 487-4959 or Rome (396) 7552601.

Cambridge, England. Furnished studio apartment for rent, available mid-October for 6 months - 1 year. Centrally heated, attractively furnished, near city centre and river. £250 (pounds) per month, excluding utilities. Apply Doreen Howard, 333 Pearl Street, New York, NY 10038. 212-285-1256 after 6 pm.

Accommodation Shared

Apartment to Share. 1 bedroom available in modern Annex apartment, furnished if required. Fireplace. Carpeted. Would like to share with non-smoking female, 30ish. Rent \$350 + hydro. Call 534-0650 (early or late).

June 1. Apartment to share, 2 bedroom, 1½ baths, Jarvis & Carlton, pool, sauna, sundeck, underground parking, telephone, cleaning person, answering service, fully furnished. \$400 month all inclusive. Call Fay Barnes, 365-1110, 10 a.m. - 5 p.m. weekdays.

Accommodation Houses & Properties for Sale

Annex Estate Sale. Gracious 3 storey mansion, 6 bedrooms, 4 fireplaces, 3 baths, beautiful oak woodwork, bay windows, high ceilings. Attached double garage. 142' lot. Presently single family residence, could be income property. Steps to U of T, Bloor shops, etc. Marion Dick, Sadie Moranis Limited, 449-2020.

For Sale. Yonge & Glencairn: 4 bedroom house in excellent condition. Ideal for family. Close to John Ross Robertson School and subway. \$179,500 call 978-8516 or 485-0580.

Secretarial

Typing of books, theses, term papers. Fifteen years' academic, legal and business experience. Highest quality work. IBM Correcting Selectric III. \$1.35 each double-spaced text page. Pam, 925-4967. St. George Street, north of Bloor.

Word processing services — manuscripts, theses, resumés, reports, etc. Efficient, reasonable and fast. Call The Word Movers 531-8782.

Professional Typing and Word Processing ("camera ready" copy): Essays, theses, manuscripts, Technical reports, multiple letters and persuasive resumés. Sterling University References. On campus — 81 Harbord St. at Spadina. 968-6327.

BUSY FINGERS Secretarial Services — We offer fast and accurate typing of essays, theses, academic papers, etc. From \$1.35 per page. Satisfaction guaranteed. 1050-A Bloor St. W., Toronto, 532-5101.

COLLEGE TYPING & WORD PROCESSING — Repetitive personalized letters; mailing lists & labels; Resumés, dissertations, scripts & term papers; Technical, scientific & academic reports; Letter quality and draft quality printouts. 270 Augusta Ave. (one block west of Spadina at College). 928-3492.

Word Processing — Overwhelmed with assignments? Essays, theses, reports, repetitive letters professionally presented, edited (if required), proof-read and printed on quality paper. Many years experience, reasonable rates. Phone Joyce 298-3639.

The Word Processing Centre offers years of professional experience at low prices — use your University of Toronto Appropriation Account or cash. We handle manuscripts, CV's, transcripts of research data, technical and medical reports, theses, sorted mailing lists, form letters etc. Call 978-5021 or drop in to the Medical Sciences Building, 1 King's College Circle, Room 3247, for free estimates.

Miscellaneous

Passport photos now on campus. B/W Polaroid, 2 for \$5.50 (incl. tax, cash or internal code only). Wednesdays 10-2 (other times by appt.) Inst. Media Services, Rm 021, Best Inst. 112 College St. 978-8919.

Backpack Canada & United States. Adventuresome backpacking treks in the Canadian Rockies, The Grand Canyon in Arizona, The Grand Tetons in Wyoming, The Great Smokies in Georgia, The Florida Trail, The White Mountains of New Hampshire, etc. Also, base camp hiking trips. Adult, co-ed, 7 to 10 days. We have a great time. Request brochure. WILLARD'S ADVENTURE EXPEDITIONS, Box 10, Barrie, Ontario, Canada L4M 4S9.

Vision Computer Education Inc. New series of its successful microcomputer courses featuring: "hands on" practice with the computers; small classes ensuring individual attention; highly qualified and experienced instructors. 20% discount for U of T staff and students. Call 968-1405 or drop by 1255 Yonge St. (at Summerhill) for details.

Campus Employment for Native Students Program is looking for faculties, departments and offices on all campuses willing to hire native high school students for July and August. Wages are paid by Provincial Govt., summer youth employment program, Experience '84. The hiring department will be responsible for paying \$60 weekly living allowance. If your department is interested in participating in the program, call Judy McClard or Ursula Souliere at 978-4136 for details.

For Sale. Two aquariums: 50 gallons and 10 gallons. Both fully equipped. \$200. Telephone: 787-7613.

Part-time office manager/executive secretary for non-profit organization. Office, typing and public relations skills required. Salary \$8,500 per year. Please send resumé to Royal Canadian Institute, 191 College St., Toronto M5T 1P9.

HARCOURTS LIMITED



OFFICIAL UNIVERSITY OF TORONTO ROBES

ALL CANADIAN AND FOREIGN UNIVERSITIES

26 Duncan Street TORONTO (416) 977-4408